

ANNUAL REPORT FOR 2011



Shoe Heel Creek Mitigation Site
Robeson County
TIP No. B-4248



Prepared By:
Natural Environment Unit & Roadside Environmental Unit
North Carolina Department of Transportation
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SUMMARY

The Shoe Heel Creek Mitigation Site is located in Robeson County. The site was planted in March 2006 and was designed as mitigation for wetland impacts associated with bridge project B-4248.

The mitigation encompasses approximately 0.16 acres of wetland restoration. The restoration effort involved the removal of the old existing roadway fill and monitoring the area to ensure that it re-attains wetland jurisdictional status. Hydrologic monitoring is not required for this project; however, vegetation monitoring is required for three years.

The site grading limits were adjusted slightly after meeting on-site with the Army Corps of Engineers. The adjustment was made to preserve mature baldcypress trees located onsite.

A portion of the site was inadvertently mowed after completing the July 2008 monitoring evaluation. This portion was replanted on February 2, 2009. The entire site was mowed again sometime after the August 2010 monitoring evaluation. NCDOT replanted the site with one gallon baldcypress and swamp blackgum trees and installed additional signage identifying the mitigation site on May 10, 2011. The Division has been made aware of the ongoing encroachments at this site. Due to the site being replanted and signed, Shoe Heel Creek site shows by visual observation that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

NCDOT proposes to discontinue vegetation monitoring at the Shoe Heel Creek Site.

1.0 INTRODUCTION

1.1 Project Description

The Shoe Heel Creek Mitigation site is located at Bridge No. 170 on SR 1101 (Figure 1). The site consists of approximately 0.16 acres of mitigation for wetland impacts associated with project B-4248.

1.2 Purpose

In order for a mitigation site to be considered successful, a site must meet vegetation success criteria. This report details the vegetation monitoring in 2011 at the Shoe Heel Creek Mitigation Site. Hydrologic monitoring was not required for the site.

1.3 Project History

March 2006	Site planted
July 2006	Vegetation Monitoring (1 year)
July 2007	Vegetation Monitoring (2 year)
July 2008	Vegetation Monitoring (3 year)
February 2009	Mowed area was replanted
June 2009	Vegetation Monitoring (4 year)
August 2010	Vegetation Monitoring (5 year)
May 2011	Mowed site was replanted
August 2011	Vegetation Monitoring (6 year)

1.4 Debit Ledger

The entire Shoe Hill Creek mitigation site was used for the B-4248 project to compensate for unavoidable wetland impacts.

2.0 VEGETATION: SHOE HEEL CREEK MITIGATION SITE (YEAR 6 MONITORING)

2.1 Success Criteria

Success Criteria states that the impacted area where the old existing roadway fill was removed shall be replanted using native species and must re-attain wetland jurisdictional status at the end of three years.

2.2 Description of Species

The following wetland species were planted in the Wetland Restoration Area:

Taxodium distichum, Baldcypress

Nyssa sylvatica var. *biflora*, Swamp Blackgum

2.3 Results of Vegetation Monitoring

The entire site was mowed after the August 2010 monitoring evaluation. NCDOT replanted the site with one gallon baldcypress and swamp blackgum trees and installed additional signage identifying the mitigation site on May 10, 2011. The August 2011 monitoring evaluation shows that the impacted area is re-attaining wetland jurisdictional status and the planted species are surviving.

Site Notes: Other species noted include: red maple, lespedeza, pine, woolgrass, cattail, common rush, sweetgum, goldenrod, and various grasses.

2.4 Conclusions

There were approximately 0.16 acres of wetland restoration planted on site. There was no vegetation plots established on the site. By visual observation, the Shoe Heel Creek site shows that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to discontinue vegetation monitoring at the Shoe Heel Creek Site.

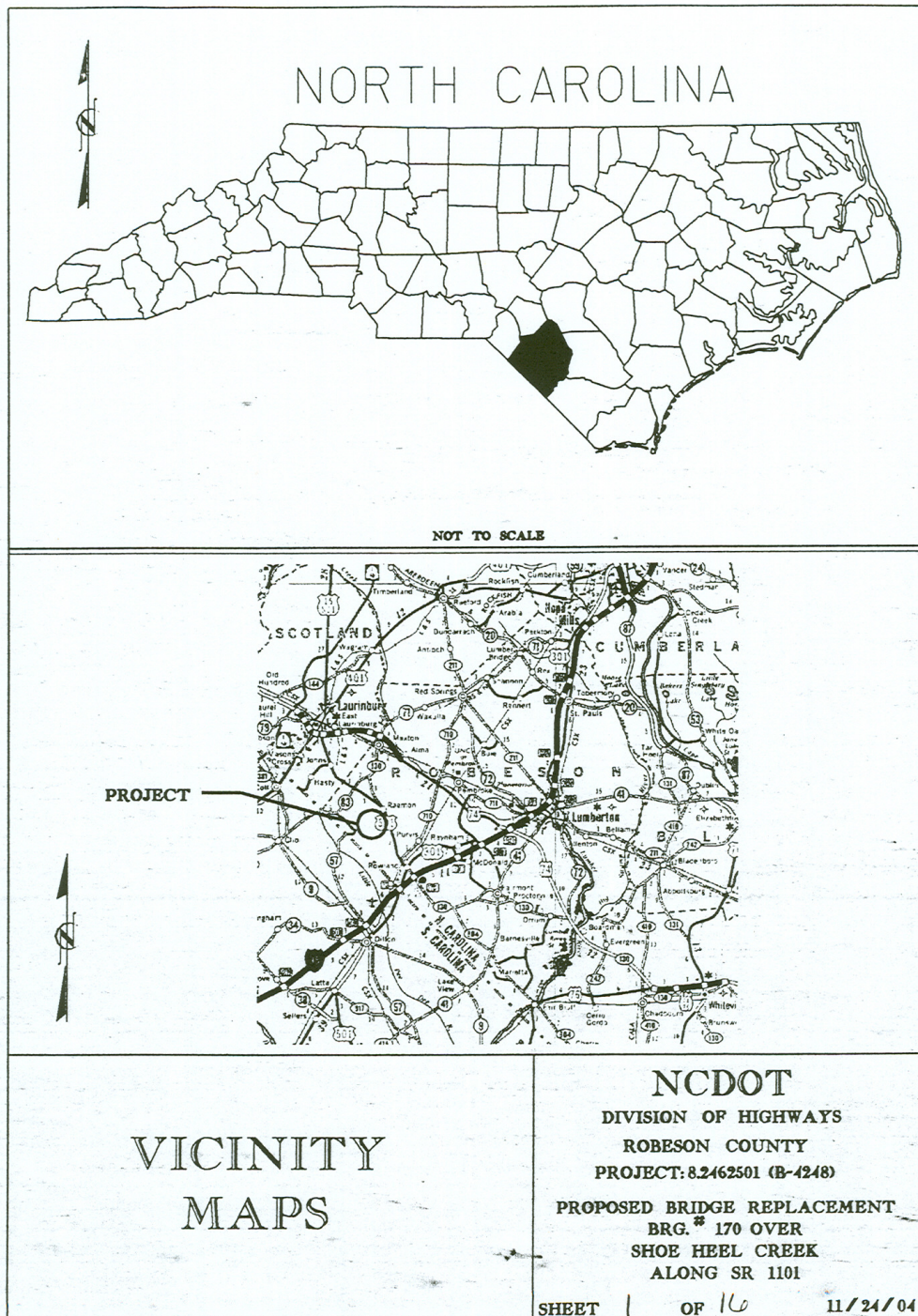


Figure 1. Site Location Map

APPENDIX A

SITE PHOTOS

Shoe Heel Creek



Photo 1



Photo 2

August 2011

Shoe Heel Creek



Overview Photo

August 2011